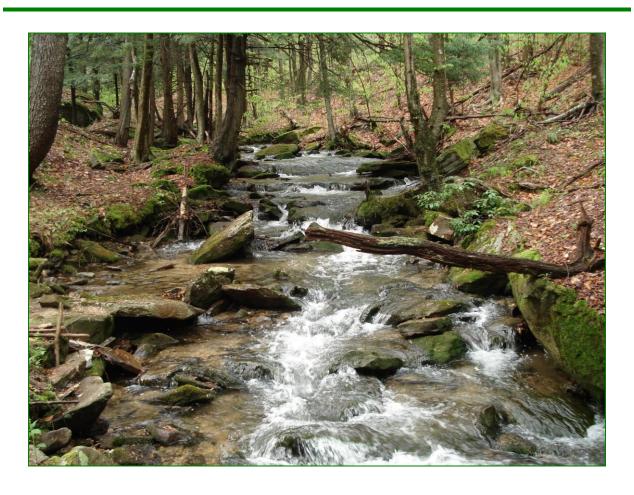
# **ALLEGHENY WINS**

"WATERSHED IMPROVEMENT NEEDS"

# **COALITION**

**ANNUAL REPORT 2010** 



#### **MISSION**

To promote protection, restoration, and habitat improvement activities in watersheds that lie entirely or partially in the Allegheny National Forest to achieve Forest Service and community needs through collaboration and partnerships.

Allegheny WINS	2010 Annual Report
Cover photograph: Minister Creek by Alex Vallejo. Five m Counties, are managed under the Wild Brook Trout Enhance no tackle restrictions, but no brook trout may be killed or had	ement program. Fishing is open all year round, there a

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# What is Allegheny WINs?

Northwestern Pennsylvania is fortunate to have many miles of high quality streams and rivers. The Allegheny River, a federally designated Wild and Scenic River, is the centerpiece of the half-million acre Allegheny National Forest. The Allegheny and its major tributaries, Tionesta Creek and the Clarion River, are well known for their recreational value and high quality fisheries. Healthy populations of sport fish such as trout, bass, walleye, muskellunge and pike share these waters with rare and endangered species of turtles, mussels, amphibians, invertebrates and fish. Rich riparian zones provide feeding areas, nesting sites, and travel corridors for waterfowl, birds of prey and other wildlife. Thousands of miles of smaller streams are home to our state fish, the Eastern Brook Trout.

The scenic waters of the Allegheny region appear to run clean and pure, and in fact some are now in better condition than they were decades ago. The Allegheny River, Clarion River, and Tionesta Creek each support healthy fisheries, which was not always the case. From the late 1800's through the mid 1900's, the rivers were spoiled by pollution from pulp mills, tanneries, mines, intense oil and gas exploration, and timber harvests. As these industries faded, conservation measures were implemented and the waters began to heal and recover.

Unfortunately new threats have arisen to again threaten our waters. Impacted by decades of acid rain and industrial pollution, the region's aquatic ecosystems are now being stressed by booms in oil and gas development and outdoor recreational activities. The number of miles of impaired streams is steadily increasing in the region, with some of the most vulnerable being our smaller headwater tributaries. These first and second order streams provide important habitat for fish and wildlife, and ensure that clean water flows to downstream communities by controlling sediment and nutrient loads. They also stabilize flows by retaining water during storm events and releasing it slowly over time maintaining a base flow during drier periods.

Because their natural buffering capacity is weak, the region's freestone streams are vulnerable to acid deposition. An acid rain event can immediately lower the pH in streams and virtually eliminate aquatic invertebrates and fish in large sections of streams.

Streams affected by acid deposition often suffer from increased sedimentation as well. An extensive network of dirt and gravel roads overlays the entire WINs area. Over 2000 miles of oil and gas access roads and 1200 miles of Forest Service roads penetrate even the most remote corners of the National Forest. The native sandstone material used to construct these roads is comparatively soft, breaks down easily under traffic, and readily erodes into adjacent streams. As a result, gravel stream bottoms which are vital for fish reproduction, become embedded with mud and sand. Aquatic invertebrates are also unable to survive under these conditions so a primary source of food for fish is lost. The result is a loss of critical habitat for coldwater species and a reduction in overall productivity of the stream. Sensitive species like trout have to migrate up into smaller tributaries or downstream into larger waters to survive.

Other issues related to dirt and gravel roads include elevated stream temperatures and poorly placed culverts and road crossings that act as barriers to fish passage. Several of the region's remote streams that once held healthy populations of brook trout, have become degraded because of these problems.

Most of the streams across the region lack habitat complexity created by large wood due to historic logging activities. The current habitat is largely defined by a high frequency of riffle and glide features with few pools. Since pool habitat is important for aquatic organism survival and propagation, streams in the region may not fully meet Pennsylvania designated protected water uses due to the lack of adequate aquatic habitat in the form of pools. Best management practices now encourage the protection of riparian

areas by leaving stream buffers and limiting activity. In response to these policies, riparian areas are reaching an age where they are beginning to contribute large wood (e.g. small trees, limbs, and trees affected by mortality and windthrow) to stream channels. Large wood will help recover the ecological processes and functions in streams such as storage of sediment and coarse organic matter in small tributary streams and the creation of larger, deeper pools. It will take several more decades of careful riparian area stewardship before these ecological processes are fully affecting larger fish-bearing streams.

Normally, a healthy aquatic system will adjust to stress caused by changes in conditions, however when changes occur more quickly than the system can adjust, it becomes unstable resulting in degradation. This has been the case in and around the Allegheny National Forest. The situation is demanding greater protection of healthy and pristine watersheds and repair to the impaired ones.

In summary, the main environmental problems affecting Allegheny watersheds include:

- Atmospheric deposition
- Sedimentation, erosion and instream habitat degradation from sandstone based roads used for timber and oil and gas well access
- Sedimentation and erosion problems associated with recreation such as camp sites, boat and canoe launches, and all terrain vehicle trails
- Fish barriers and habitat degradation around culverts, crossings and dams
- Lack of instream habitat for fish

In an economically active and large geographic area such as the Allegheny, these problems can be overwhelming for any single government agency or community-based organization. To address the issues and find solutions to the problems, a group of like-minded non-profit organizations, private individuals, and local, state and federal government agencies decided to join forces and build a coalition. The common thread that binds the partners of this coalition is an interest in developing and promoting watershed restoration activities.

The Allegheny Watershed Improvement Needs Coalition (WINs) was formed in April 2007 with its mission "to promote protection, restoration, and habitat improvement activities in watersheds that lie entirely or partially in the Allegheny National Forest to achieve Forest Service and community needs through collaboration and partnerships." The group's main focus is on developing and implementing projects to protect and improve high quality watersheds and aquatic ecosystems and to restore others that are impaired. This includes outreach and education campaigns targeting rural communities and youth as means of preventing problems from occurring in the future. In its first 2 ½ years, the Coalition has demonstrated success in project development, and this report documents those accomplishments.

Allegheny WINs is governed by a steering committee made up of representatives of municipal, county, state and federal government agencies, and leaders of various non-profit organizations such as the Western Pennsylvania Conservancy, Trout Unlimited, and local watershed organizations. The group meets bi-monthly at locations throughout the forest.

# Where is Allegheny WINs?

**ALLEGHENY** 2500 Scranton **Square miles** Wilkes-Barre Allentown Over 600,000 Acres of public land Harrisburg & Pittsburgh 2000+ River and stream Baltimore miles Washington, D.C. 14 **Major watersheds** 3500+ Miles of dirt and Open Water Evergreen Forest gravel roads Residential Mixed Forest Commercial/Industrial Grasslands/Herbaceous Deciduous Forest Pasture/Hay

Map courtesy of US Forest Service

Emergent Herbaceous

Woody Wetlands

Wetlands

Row Crops/Small Grains

New York

Philadelphia

Allegheny WINs projects can be found on the half-million acre Allegheny National Forest and on neighboring State Forests, State Game Lands, and private lands in Northwestern Pennsylvania. The Allegheny National Forest is within a day's drive of 1/3 of the nation's population.

# Clarion River Watershed Projects



The Clarion River near Cook Forest

# **Big Mill Creek Watershed Restoration Project**

#### **Partner – Sponsor: Elk County Freshwater Association**

The Big Mill Creek Acid Deposition Project has had significant progress since July 2010. Various activities have been completed related to two projects in the Big Mill Creek watershed including the project at Cherry Run and the Big Mill Creek sites. Progress for the two projects since July included 1) Bid process, 2) Contractor selection, 3) Ground breaking, 4) Access road installation, 5) Clearing and grubbing and installation of E&S controls, 6) Completion of earthwork, 7) Installation of treatment cell piping including underdrain, header pipes, and outlet flow controls, 8) Placement of limestone in the treatment cells, 9) Channel installation including placement of rip-rap, 10) Placement of the stone on the embankments of the limestone basins, 11) Installation of the intake structures in the streams, 12) Installation of the intake piping from the streams to the treatment systems, 13) Mulching of the sites, and 14) Site clean-up. Due to trucking and weather issues, the spent mushroom compost has not been placed in the vertical flow wetlands but will be delayed until early spring when weather and site conditions permit. Placement of the spent mushroom compost and planting vegetation in the vertical flow wetlands are the only two remaining tasks to complete the Cherry Run and Big Mill Creek sister treatment systems.



Piping and Limestone Placement

There are several remaining construction activities to be completed at the Cherry Run and Big Mill Creek systems, which are: 1) placement of the spent mushroom compost; 2) planting of the vertical flow wetlands with wetland vegetation (e.g., cattails); 3) final clean-up; and 4) demobilization. Due to wet weather constraints spent mushroom compost was not placed in the vertical flow wetlands (there is no spent mushroom compost in the limestone basin) during the fall construction. The remaining activities will be completed in the spring of 2011 when weather and site conditions permit. Spent mushroom

compost will be obtained and stockpiled locally prior to the spring thaw to minimize delays in obtaining the material.

The Cherry Run and Big Mill Creek acid deposition passive treatment systems are currently treating a portion of the stream flow in the limestone basins. This treatment flow was initiated to test intake piping, piping within the systems, and maintaining water flow through the systems and piping in order to prevent freezing within the intake, underdrain, and outlet piping. The flow through the systems should prevent any undesirable weather damage.

It is anticipated the Cherry Run and Big Mill Creek systems will be completed in early spring 2011 with final startup and operation initiated at this time. It is also anticipated the third site on the unnamed tributary to Ellithorpe Run will be constructed in the spring of 2011 with remaining funds. Based on expected available funds it is likely the final system will be scaled down and only include a single basin (i.e., limestone basin). The system will be a complete and functional system that will provide additional alkalinity to the watershed and should not compromise the overall objectives of the restoration project on the Big Mill Creek. The design and installation will also include provisions for future installation of a vertical flow wetland if additional funding becomes available and stream conditions require additional alkalinity input.

#### **Activities and Accomplishments**

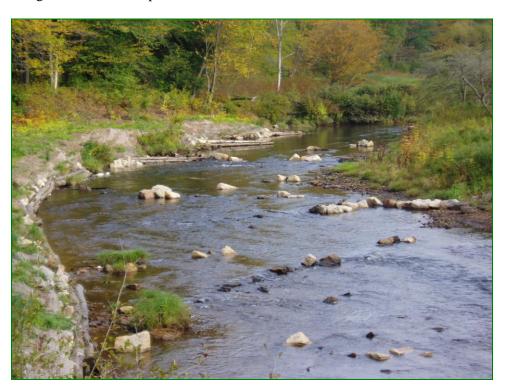
- EFCA and Elk County Conservation District (ECCD) regularly take students sampling on Big Mill Creek and its tributaries
- ECFA completed two more passive treatment systems on Big Mill and Cherry Run. Both will be operational in early spring 2011
- In 2011, ECFA will begin construction of the fourth and final structure in spring 2011 on a second tributary to Ellithorpe Run

# **Spring Creek Watershed Restoration Project**

#### Partner – Sponsor: Western Pennsylvania Conservancy

The Spring Creek watershed in Forest and Elk counties is a major tributary of the Clarion River, a federally designated Wild and Scenic River that forms the southern boundary of the Allegheny National Forest (ANF). The forests and waters of the Spring Creek watershed are recovering from decades of unsustainable timber harvest and industrial development. Today the watershed is prized for its recreational resources, timber base, and as a coldwater fishery.

The goal of Spring Creek Watershed Restoration Project is to restore and improve riparian and instream habitat throughout the drainage by reducing sedimentation, rehabilitating riparian areas, and removing barriers to fish passage. Specific objectives of the project included: 1) reconstructing four miles of Forest Roads 130, 227, and 403 to improve drainage and reduce sedimentation; 2) eliminating multiple fish passage barriers associated with inadequate road crossings; 3) hardening and decommissioning dispersed camp sites; 4) hardening existing parking to reduce sedimentation while improving access to the stream; and 5) addressing soil and water impacts associated with >80 miles of user created horse trails.



Multi-Log Vane Deflectors and Modified Mudsills

#### **Activities and Accomplishments**

- In 2006, the US Forest Service (USFS) and Pennsylvania Game Commission (PGC)
  decommissioned stream crossings on Hill Run and Pigeon Run and rehabilitated ½ mile of usercreated horse trail.
- In 2008 a number of projects were completed in the drainage including:

- Fish habitat improvement structures were constructed at two locations on Rappe Run in 2008 as part of a local Eagle Scout project.
- ➤ Over 1,000 trees and shrubs donated by Penny Pines and PGC were planted in the riparian zone near the FR130 Bridge by USFS Youth Conservation Corps crews.
- ➤ Western Pennsylvania Conservancy (WPC) and USFS reconstructed 2500' of FR130 which was in very poor condition and contributing large volumes of sediment to the stream.
- ➤ USFS applied limestone surfacing to two miles of FR227 to reduce erosion and sedimentation, and to help buffer the mainstem against the negative effects of acid precipitation.
- ➤ WPC, PGC, and Seneca Resources partnered to reconstruct approximately 1 mile FR130 on SGL 28. USFS replaced two undersized culverts on FR130 and FR131 over Raven's Run and Wolf Run.
- ➤ USFS applied 2000 feet of limestone surfacing on FR130 and FR131 at stream crossings to reduce sedimentation. Additional culverts were placed to divert runoff to the forest floor
- In 2009, PGC and USFS constructed 10 multi-log vane deflectors and two modified mudsills in the mainstem stabilizing over 1,200 ft of streambank.
- In 2010, USFS and WPC replaced two undersized culverts on FR227 reconnecting a wetland and two small tributaries with the stream network.
- Also in 2010, USFS, WPC, and the Pennsylvania Fish & Boat Commission (PFBC) completed a stream bank stabilization project on Rappe Run

#### **Future Activities**

• USFS, WPC, and PFBC have begun planning for a second fish habitat improvement project to be completed in summer 2011

# Upper and Middle Allegheny River Watershed Projects



Cleaning up the Allegheny

# Allegheny RESERVOIR Cleanup, Sixth Annual

**Partner – Sponsor: US Forest Service** 

Building upon the success of the 2009 Allegheny RIVER Cleanup event organizers Allegheny Outfitters, Northwest Bancorp, and the Allegheny National Forest decided to combine the annual RESERVOIR cleanup and annual RIVER cleanup as sister-projects. The goal being to provide two complementary 'community conservation events' each year that will bookend each summer (May and September) and:

- provide hands-on volunteer opportunities that foster "environmentally friendly" attitudes and motivations in participants,
- raise awareness of environment issues and promote environmental conservation in our local communities, and
- encourage individuals and organizations to work independently and collectively to address problems and prevent new ones.



Clean Up Crew on the Banks of the Allegheny River

With that in mind, this year's RESERVOIR cleanup was coordinated and completed as a moderate first-step in its gradual evolution into a "community conservation event." On Saturday, May 15, the Allegheny National Forest and its three traditional partners were joined by fourteen new ones.

The Eighteen partners include:

- Allegheny Outfitters
- Friends of the Allegheny Wilderness
- Glade Township Volunteer Fire Department
- Kinzua Development Association
- Kinzua Fish & Wildlife Association

- Northwest Savings Bank
- Pennsylvania Fish & Boat Commission (partner since 2008)
- Pennsylvania Kinzua Pathways
- PNC Bank
- Trout Unlimited Cornplanter Chapter
- US Air Force Recruiting
- US Army Corps of Engineers (2005 co-founder)
- US Forest Service (2005 co-founder)
- Walmart
- Warren Co. Adult Probation & Parole (2005 co-founder)
- Warren Co. Conservation District
- Warren Co. Council on Tourism
- Young Professionals of Warren County

In total, 71 volunteers and employees collected 10 cubic yards of trash and litter from roughly 12,000 acres of public land including:

- 26+ miles of shoreline: SR59 bridge south to Red Bridge
- 15.9 miles of shoreline: Longhouse Scenic Drive (all 11.3 miles) and SR321 (4.6 miles from Longhouse SD intersection to Chappel Bay)
- (5) USFS campgrounds: Dew Drop, Elijah Run, Kiasutha, Morrison 'Boat Access' and Red Bridge
- (4) USFS boat launches: Dew Drop, Elijah Run, Kiasutha, and Dunkle Corners
- Kinzua Wolf Run Marina: marina, reservoir shoreline, and Wolf Run drainage (garbage scattered by bears)
- Kinzua Point Information Center: visitors center parking area and shoreline
- Kinzua Beach: parking area, beach, and shoreline

Now in its sixth year, the positive effects of the annual RESERVOIR Cleanup are very apparent. In previous years a lot of time and energy was spent removing large "dumped" items such as television sets, microwaves, radios, a refrigerator, sets of bed springs, large wooden spools,

items such as television sets, microwaves, radios, a refrigerator, sets of bed springs, large wooden spools, rolls of plastic pipe, 55-gallon drums, snow fence, carpeting, lawn chairs, and tires. Now that those items are gone, this year's volunteers were able to spend the majority of their time collecting litter. As a result of this annual project, the shorelines and waters of the Allegheny Reservoir are much safer and cleaner places for the wildlife and recreationalists who use them.

# **Allegheny Reservoir Fish Habitat Improvement Projects**

#### Partner – Sponsor: Kinzua Fish and Wildlife Association

For nearly thirty years, the Kinzua Fish and Wildlife Association, along with its partners, the US Forest Service, and the U.S. Army Corps of Engineers have worked cooperatively to improve fish habitat in the Allegheny Reservoir.



Porcupine Cribs Being Placed in the Reservoir

To date over 30,000 items have been placed in the reservoir:

- 10,126 tires
- 18,518 Christmas trees
- 1,230 porcupine crib seniors
- 903 porcupine crib juniors
- 36 bass nesting boxes
- 32 catfish nesting boxes
- 20 stone reefs and
- 7 ambush cribs

In 2010, 675 Christmas trees and 63 porcupine crib juniors were placed in the reservoir.

# Allegheny River & Conewango Creek Cleanups, Second Annual

**Partner – Sponsor: US Forest Service** 

To call the second annual Allegheny River Cleanup a success would be an understatement. Beginning with the Conewango Cleanup, the community's support and enthusiasm for this year's event was "Simply Amazing"! In total, 511 volunteers donated 4,292 hours while removing trash from 31 miles of the Allegheny River, 18 miles of Conewango Creek, and 5 miles of Brokenstraw Creek.



Young Volunteers Helping Remove Trash

Event organizers were amazed at the groundswell of support that this second annual event has generated. "We had way more hands out there. That's really what it came down to," said Piper. "The partners and the volunteers in the clean-up are the key. Without them, my pile of trash at the end of the week would be pretty small." "Lindell could not say enough about the tenacity of the volunteers and partner agencies. The community pride here, from local folks and the folks who come here on vacation, is amazing"

The cleanup yielded over 70 cubic yards of trash, plus 9,560 pounds of metal, over 200 tires, 24 buckets of glass bottles, 33 bags of plastic bottles, 17 bags of aluminum cans, which were all recycled. Other items of interest included:

1974 Harley-Davidson motorcycle frame Circus-sized tent

Trampoline net

- (17) 55-gal drums, plastic and metal
- (8) Shopping carts
- (7) Pressure tanks
- (6) Tractor weights, plate steel
- (2) Railroad tie connector plates

1,000-gallon oil tank, bottom plate and pieces of walls

Fuel oil tank, 150-gallon

Telephone pole w/ cable box and >150' of cable

Lightning rod

Metal pipe, various sizes, 500 ft

Well casing head, 300 lbs

Gear drive from a historic oil field engine, 200 lbs

'One really scary baby doll (eek!)'

- (14) Mattresses or box springs
- (9) Refrigerators
- (5) Sinks
- (2) Kitchen stoves
- (2) Microwaves
- (2) Freezer
- (3) Washing machines
- (2) Clothes dryer
- (2) Sofas

Safe, fire resistant

Claw foot bath tub

Toilet

Shower stall, door and wall

Computer desk

Radiator heater, wall mounted

- (6) Tractor tires, large
- (4) Lead automotive batteries
- (4) Rims
- (2) Engine blocks

Drive shaft

Transfer case

Truck bed-liner

Mini-van bench seat

Automobile seat, with head and arm rest

(3) Traffic barrels, orange, and more!!!!

# **Big Bend Bird Viewing Platform**

#### **Partner – Sponsor: The Allegheny Outdoor Club (AOC)**

A bird-viewing platform was constructed and a Riverside Watchable Wildlife Trail was developed at one of the most popular tourist sites in Northwestern Pennsylvania – the Kinzua Dam and Allegheny Reservoir.

On a high bank overlooking the Allegheny Wild & Scenic River, visitors can view many different birds including bald eagles, ospreys, mallard ducks, mergansers, and blue herons. The 16 X 24 foot platform completed in September 2009 is made from various

materials including Western Red Cedar and man-made Trex that blends in with the awesome setting of the dam's outflow.



Downstream View from the Platform

Rounding out the project are ten strategically placed interpretive panels that include information on fish in the river and reservoir, the river habitat, birds present in the area, non-point source water pollution, and other educational pictures and information. A ribbon-cutting ceremony was held in spring 2010. Penn Soil RC&D Council and the US Army Corps of Engineers also provided strong support for the project.

#### **Browns Run Watershed Assessment**

#### Partner - Sponsor: Western Pennsylvania Conservancy

Located in Warren County near the City of Warren, the Browns Run watershed contains three streams classified as Exceptional Value (EV) – Browns Run, Morrison Run, and Dutchman Run.

This project is a comprehensive Coldwater Heritage study of the Browns Run watershed to collect baseline data on water quality and aquatic health. The goal of the plan is to document threats and recommend protection and restoration efforts in the watershed.

Key participants in the study include the Western Pennsylvania Conservancy, Warren County Conservation District, and Cornplanter Chapter of Trout Unlimited, and the US Forest Service.

#### **Activities and Accomplishments**

- Fish sampling was completed for mainstem Browns Run and Morrison Run in summer 2009. Sections of Dutchman Run in the ANF were sampled for fish in summer 2008
- Fisheries data are currently being compiled and analyzed
- A draft of the Coldwater Conservation Plan for the Browns Run Watershed is expected to be complete by April 2011

#### **Conewango Creek Water Trail**

#### Partner – Sponsor: Conewango Creek Watershed Association

In 2010 the Conewango Creek Watershed Association, Warren County Visitors Bureau, and Warren County Council on Tourism joined forces to persuade state officials to designate the Pennsylvania portion (13.5 miles) of Conewango Creek as an official state water Trail.

The state's Fish and Boat Commission describes an official Pennsylvania water trail as: "boat routes suitable for canoes, kayaks and small motorized watercraft. Like conventional trails, water trails are recreational corridors between specific locations. Water trails are comprised of access points, boat launches, day use sites, and in some cases overnight camping areas. Each water trail is unique, a reflection of Pennsylvania's diverse geology, ecology and communities."



Paddling the Conewango

The newly designated trail now 'officially' links the Marden E. Cobb Waterway Trail in New York State with the Middle Allegheny River Water Trail in Pennsylvania and establishes 174 river miles of designated accessible waterway passage.

The Marden E. Cobb Waterway Trail (53 miles) consists of wild and scenic flat waters on the Cassadaga and Conewango Creeks and attracts 3,000 canoeists annually. The Middle Allegheny River water trail (85 miles) extends from the Kinzua Dam to Emlenton attracts well over 20,000 visitors each year.

# **McKean County Fish Habitat Improvement Projects**

#### **Partner – Sponsor: McKean County Conservation District (MCCD)**

In 2010, MCCD completed 16 fish habitat improvement projects on streams throughout the county. Projects were implemented through the District's Stream Bank Stabilization Initiative and funded through DEP's Growing Greener II County Environmental Initiative, the Stream Improvement Program, and PFBC's Sinnemahoning Grant Program. Partnering with the PFBC Division of Habitat Management, District staff worked with multiple contractors to install numerous structures. Project locations included: Marvin Creek, Minard Run, Bolivar Run, Marilla Brook, Kendall Creek, Irons Hollow, Ice Pond Brook, Lillibridge Creek, Bell's Run, and Potato Creek.



120 Ft. Modified Mud Sill on Minard Run

Since 2007 the District has stabilized approximately 5500 feet of streambank using multi-log deflectors, modified mud sills, bank fill benches, rock cross vanes, log cross vanes, overhead cover deflectors, and bank cover cribbing on 42 separate projects. They have also created nearly a mile of new riparian area by planting 900 shrubs. In total, these projects are estimated to have prevented 500 tons of sediment from entering the Waters of the Commonwealth.

#### **McKean County Stream Assessments**

#### Partner - Sponsor: McKean County Conservation District (MCCD)

MCCD is working to complete an assessment of three streams impacted by coal strip mining in the southeastern corner of the county: Parker, Hamlin, Railroad, and Scaffold Lick Runs. District staff, PA DEP, Trout Unlimited's Eastern Abandoned Mine Program, and Hedin Environmental have partnered to complete numerous water chemistry samples, fish surveys, and biological and habitat assessments on each stream.

A fish survey completed on Railroad Run found a substantial population of wild brook trout and the data was forwarded to the Pennsylvania Fish and Boat Commission (PFBC). Soon after PFBC, with the District's assistance, conducted its own fish survey of Railroad Run and neighboring streams Lyman Run and Indian Run to confirm the collection, and Railroad Run is now considered a wild trout producing stream as a result of this project.

A comprehensive report will be compiled using all data collected, and restoration priorities for these watersheds will be outlined. The project is funded through DEP's Bureau of Water Standards and Facility Regulation, the Headwaters RC&D Council's Sinnemahoning Watershed Grant Program, Trout Unlimited's Eastern Abandoned Mine Program, and Foundation for Pennsylvania Watersheds.

Also funded by DEP's Bureau of Water Standards and Facility Regulation, the District has also begun an assessment of several tributaries to the Allegheny River; Lillibridge Creek, Twomile Creek, Annin Creek, Rock Run and Newell Creek. With water chemistry testing and biological and habitat assessment work completed by the District and PA DEP, watershed restoration projects are scheduled to begin the spring of 2011.

# **Morrison Run Restoration Project**

#### **Partner - Sponsor: Cornplanter Chapter of Trout Unlimited (CCTU)**

Morrison Run is classified as an Exceptional Value stream by the PA Department of Environmental Protection and holds a good population of native brook trout. It is also a major tributary to Browns Run and ultimately the Allegheny River, which is a federally designated Wild and Scenic River. The forests and waters of the drainage are recovering from decades of past exploitation from unsustainable timber harvest and industrial development. Today the watershed is prized by the local community for its recreational resources, timber base, and as a native brook trout fishery.

The goal of the project is to restore and improve riparian and instream habitat along Morrison Run through the reduction of sedimentation, rehabilitation of riparian areas, and removal of fish passage barriers from the mainstem.

Specific objectives of this project include:

- 1) Expanding the range and numbers of the native brook trout populations, currently confined to isolated pockets throughout the drainage.
- 2) The elimination of all four fish passage barriers from the mainstem.
- 3) Decommissioning or hardening two fords on the mainstem.
- 4) Reconstructing portions of FR156 to improve drainage and reduce sedimentation.
- 5) Improving and promoting recreational opportunities (e.g., fishing) in the drainage.



Volunteers Moving Logs to Improve Instream Habitat

Partners in the project include the Cornplanter Chapter of Trout Unlimited, Western Pennsylvania Conservancy, Warren County Conservation District, PA Fish & Boat Commission, US Forest Service, and four private landowners.

#### **Activities and Accomplishments**

- Funding applications were submitted to several sources to address three of the 10 Areas of Concern (AOCs) identified in the Morrison Run Watershed Restoration Project long-term plan. These three AOCs (1) railroad trestle, (2) private bridge, and (3) lower dam occur farthest down in the watershed near the mouth of Morrison Run. Funding is being sought to construct a rock ramp at the base of a plunge pool at the downstream end of the railroad trestle, to move and replace the private access bridge adjacent to the lower dam, and to remove the lower dam. Completion of these three projects will open fish passage through the lower third of the stream.
- On September 25, 2010, CCTU, PFBC, USFS, and WPC continued installation of instream
  habitat improvement structures in the headwaters of Morrison Run. Thirteen volunteers and
  employees, using only hand tools, constructed two log-faced stone deflectors and one modified
  mudsill. In addition, three children assisted with the habitat improvement project and cleaned up
  trash from the surrounding area.
- On October 14, 2010, WPC, USFS, DEP, and a local landowner attended a pre-application meeting at the site of the lower dam on Morrison Run to begin preparation for the submittal of a permit to remove the structure. A Pennsylvania Natural Diversity Inventory Environmental Review application was submitted by WPC for the site, and all "hits" have been addressed and cleared with the corresponding regulatory agency. The dam removal is anticipated to occur during the summer of 2011, dependent upon procurement of funding.

# **Road Runoff Sediment Production Study**

#### **Partner: US Forest Service**

In summer 2010, the US Forest Service, US Department of Energy, and Center for Dirt and Gravel Road Studies at Penn State (CDGRS) worked to quantify sediment generation rates associated with oil and gas access roads across the Allegheny National Forest.

To do this, CDGRS utilized rainfall simulators to produce identical rain events at 14 separate locations. By controlling the intensity and duration of each rain event, researchers were able to make precise collections of road runoff allowing them to more accurately estimate the resulting sediment loads.



Rainfall Simulator Being Used To Estimate Sediment Loads In Road Runoff

Each 30-minute simulated rain event (event) was 0.61 inches, which has a return interval of slightly less than 2 months. Sites were 100 ft in length and sediment productions ranged from 3.2 to 60 lbs of sediment per event. The average sediment load was 24.7 lb, which equates to a sediment production rate of 1,300 lb per mile per event. Extrapolation of these results indicates that a single storm of similar intensity and duration to the design storm could be expected (very conservatively) to produce over 1,100 tons of sediment from the > 1,695 miles of unpaved access roads on the Allegheny National Forest. An estimated 385 tons of that sediment is expected to enter directly into nearby streams.

The study also identified a significant "first flush" effect on the road segments studied. Additionally, road segments that received more traffic have been more compacted and exhibit higher structural strengths. Without traffic stress, the best indicators of sediment production from the roads tested were road slope combined with road width. If the road is stressed by traffic, then sediment production becomes less dependent on road width and slope, and more dependent on road strength as measured by the California Bearing Ratio. Finally, it was observed that sediment generation from roads with very low usage would be greatly reduced by establishing vegetative cover on the road surface.

# South Branch of Kinzua Creek Acid Remediation Project

# Partner - Sponsor: Pennsylvania Fish and Boat Commission

Acid precipitation is negatively affecting streams throughout the Allegheny National Forest. Over time, chronic acidification leaches base cations from soils and decreases a watershed's natural buffering capacity. Eventually, stream pH and alkalinity levels decreased and dissolved aluminum levels rise to a point where a drainage can no longer support a healthy aquatic community. In 2005 a study comparing soil samples from 1967 and samples collected between 1997 and 1999 found that watersheds in and around the ANF are becoming more acidified due to a significant reduction in base cations.



A Youth Conservation Corp Crew Member Placing Limestone Sand At A Cross Drain Outlet along Forest Road 279

The South Branch of Kinzua Creek Acid Remediation Project, nicknamed "The Road to Brook Trout Recovery", began in 2008 as a cooperative effort between the PFBC, Penn State Center for Dirt and Gravel Road Studies (CDGR), and USFS to assess an innovative new approach for treating acidified streams while repairing and maintaining dirt and gravel roads. CDGR designed the road segments and Dr. Rachel Brennan, Penn State University, analyzed the Acid Neutralizing Media (limestone sand and crab shell chitin) to be used within the passive treatment systems. Construction was completed in July 2009 with several sections of Forest Road 279 resurfaced using a limestone based Driving Surface Aggregate (DSA). In addition, roadside ditches were retrofitted with passive treatment systems containing either limestone sand or crab-shell chitin as a treatment media to adjust water quality. In July 2010, the USFS Youth Conservation Corp helped place limestone sand at cross-drain outfall along Forest Road 279H and 279G in an effort to adjust the water quality of storm water runoff from the existing road surface.

Biological and water quality monitoring efforts continue with the assistance of McKean County Conservation District (MCCD), Clarion University of Pennsylvania (CUP), Western Pennsylvania Conservancy (WPC) and a collection of WIN's volunteers. The results have been promising. Improvements in water quality have been documented in each of the treated stream reaches. Alkalinity and pH levels rose sharply and then leveled off to adequate levels. Fish populations have also responded positively in two of the three treatment reaches. Spring 2010, fish surveys confirmed the successful recruitment of young of the year brook trout and the presence of two new species while fall 2010 brook trout redd surveys documented an increase in spawning effort in two of the three treatment reaches.

Key Partners included Center for Dirt and Gravel Roads, McKean County Conservation District, Pennsylvania State University, Clarion University of Pennsylvania, United States Forest Service, Western Pennsylvania Conservancy.

#### **Accomplishments**

- "The Road to Brook Trout Recovery" project is helping to establish a new Best Management Practice for road maintenance or new construction in watershed impacted by acid precipitation
- Water quality parameters show sustained improvement in all treatment reaches
- Brook trout young of the year production has begun in two of three treatment reaches
- Two native minnow species have recolonized one treatment reach
- Brook trout redd survey documented spawning effort in treatment reaches
- Eastern Brook Trout Joint Venture funding has been secured to expand treatment efforts in 2011

# Tionesta Creek Watershed Projects



Tionesta Creek near Barnes

#### Farnsworth Branch Fish Habitat Improvement Project

#### **Partner – Sponsor: US Forest Service**

In July 2010, the Allegheny National Forest partnered with the Western Pennsylvania Conservancy, PA Fish & Boat Commission, Warren County Conservation District, and the Cornplanter Chapter of Trout Unlimited to complete the fourth in a series of restoration projects in the West Branch Tionesta Creek watershed.

The primary objective of this collaborative effort was to stabilize 870 feet of collapsing streambank at USFS's Farnsworth Fish Hatchery. The hatchery, originally constructed in the late 1930's by men from the Civilian Conservation Corps, is comprised of a series of concrete rearing ponds which straddle both sides of mainstem Farnsworth Branch. Over time the natural meandering of the stream channel had begun to undermine seven of the structures, which would have eventually rendered them unusable do to cracking and leakage.



Building Log Structures at Farnsworth Hatchery

A secondary objective of the project was to improve instream habitat and fishing opportunities for the hundreds of children and disabled recreationalists who visit the hatchery each summer to participate in the various annual fishing derbies. Several of these are specifically for disadvantaged children and Disabled Veterans.

In all, a total twenty-seven log and rock structures were constructed using an excavator and hand tools throughout the 5 day project. Individual devices included modified mudsills, single- and multi-log vane deflectors, log faced rock deflectors, and rock vane deflectors which enhanced instream habitat by: creating additional overhead cover, deepening pools and runs, narrowing the over widened channel, and reducing erosion.

#### **Ross Run Fish Habitat Enhancement Structures**

#### Partner – Sponsor: Kellettville Sportsmen's Club

On August 14, 2010, Kellettville Sportsmen's Club (KSC) completed the second of three projects in the Ross Run fish habitat improvement project in Kingsley Township, Forest County. This year's project was located immediately downstream of last year's project and involved the placement of log and stone devices within a 300 foot reach of the mainstem. Approximately 30 club members provided volunteer labor and were supported by other partners including Marienville Youth Detention Center, Abraxas, IA Construction, Collins Pine Company, Trout Unlimited, and US Army Corps of Engineers (USACE).

Key Partners included Pennsylvania Fish and Boat Commission (PFBC), USACE, and Collins Pine Company. The third and final phase of the project is planned for completion in August 2011 along 400 foot section of the mainstem.



Log device being placed in Ross Run

#### **Accomplishments**

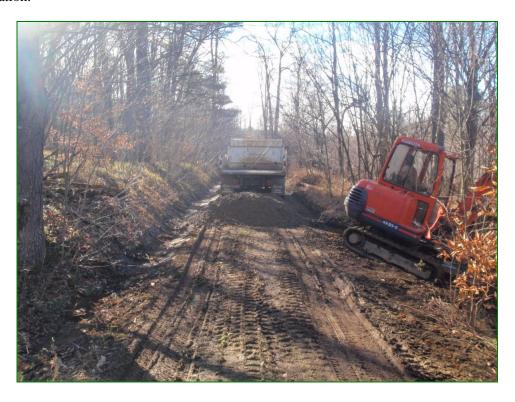
- PFBC designed and obtained the permits for the project and conducted pre-project monitoring in summer 2009
- KSC and PFBC completed Phase 1 (of 3) construction in August 2009.
- KSC and PFBC completed Phase 1 (of 3) construction in August 2010.

# West Branch Tionesta Creek Headwaters Restoration, North Country Connector Project

### Partner - Sponsor: Pennsylvania Game Commission

The North Country Connector Trail (NCCT) project is a large piece of the overall strategy to remediate environmental problems and enhance recreational opportunities in the headwaters of West Branch Tionesta Creek.

In 2007, WINS Coalition partners completed a survey of the headwaters area and identified ten areas of concern on State Game Lands 29 (SGL29) and the Allegheny National Forest (ANF). The most significant of these was Forest Road 536 (FR536) which parallels the mainstem from Chapman State Park to the Hearts Content National Scenic Area and North Country Trail system. The roadway was found to be impacting water quality in the West Branch and its tributaries at numerous locations, largely through sedimentation.



Crowning the FR536 Road Surface and Cleaning the Ditchlines

This was a concern because the West Branch is classified as a High Quality Cold Water Fishery (HQ-CWF) by the Pennsylvania Department of Environmental Protection, and its six main tributaries in the project area are either HQ-CWF (Adam Run, Slater Run, Shaw Run, Toms Run, and Jones Run) or Exceptional Value (Wildcat Run) streams.

FR536 has fallen into disrepair from lack of maintenance and is now heavily rutted and pot holed, and requires a four-wheel drive vehicle to traverse. The problem is exacerbated by the fact that FR536 follows a historic road grade which parallels the mainstem through a wet bottomland area. In total, 5.7 miles of roadway and 120 culverts need to be reconstructed and replaced, or decommissioned.

The NCCT project will reconstruct FR536 linking and enhancing access to, the collective recreational resources of Chapman State Park, SGL29, and the ANF via a 5.7 mile connector trail. The roadway is currently designated as a horse and bike trail on SGL29 but upgrades in road surfacing, stream crossings, and ADA-accessible parking are needed to enhance year-round recreational opportunities including hiking, biking, wildlife watching, cross-country skiing, horseback riding, hunting, and fishing.

Of equal importance, these very same upgrades will also provide much needed environmental improvements along FR536. Multiple fish passage barriers will be eliminated and the volume of sediment flowing to streams and nearby wetlands will be greatly reduced. The NCCT is a model project that demonstrates how recreational improvements and ecological restoration can be implemented jointly to benefit the resource, the user, and the region.

PGC engineers, in consultation with USFS engineers, will have a bid package prepared by March 2011 for the repair of the USFS and PGC portions of the road. Work is planned to commence in late spring and should be finished before the end of summer 2011.

Key partners in this project include the Allegheny Outdoor Club, DCNR Bureau of Parks, DCNR Bureau of Forestry, Pennsylvania Game Commission, Penn Soil Resource Conservation & Development Council, Northwest Commission, Penn Soil RC&D Council, Western Pennsylvania Conservancy, and the US Forest Service.

#### **Activities and Accomplishments**

- WINs pre-project monitoring fish surveys were completed in July 2008 and macroinvertabrate surveys were completed in spring 2009
- The NCCT was added to Warren County's Greenways Plan in August 2008
- DCNR, PFBC, and USFS completed a shoreline stabilization project in Chapman State Park in October 2008
- USFS, PGC, Allegheny Outdoor Club and WPC completed a road decommissioning project on SGL 29 near Wildcat Run in May 2009 (see Earth Day 2009).
- In May 2010, Penn Soil RC&D Council applied for a Northwest Greenways Grant and received \$10,000 to help reconstruct the Chapman State Park portion of the NCCT. DCNR Chapman State Park was able to acquire additional machinery and personnel and construction began in October 2010 with ditch cleaning, replacement of culverts, brush clearing, and improvements to the road base. The roadbed was then graded and rolled and left to settle for the winter. The roadway will be top dressed with limestone in spring 2011.

# Education and Outreach



Volunteers Cleaning up an Illegal Dump Site in DCNR's Anders Run Natural Heritage Area

#### Earth Day 2010 Events

WINs Coalition partners organized a broad range of events in observance of the 40th Anniversary of Earth Day. For more information or to volunteer for upcoming events, contact information is provided.

**TROUT AND CLEAN STREAMS EXPO**, 3<sup>nd</sup> Annual (April 10): This annual event is hosted by the Cornplanter Chapter of Trout Unlimited and takes place on the Saturday before opening day of Pennsylvania's trout season. It is held is held at the Sheffield Lions Den from 10:00 a.m. to 5:00 p.m Next year's date is set for Monday, April 9, 2011. Contact: Gary Kell, *TUCC*, at 814-723-4689 or garyffc1@verizon.net.

<u>WINS EARTH DAY EVENT</u>, 2<sup>nd</sup> Annual (April 18): *DCNR* and *USFS* observed Earth Day by cleaning up two illegal dumpsites and collecting roadside trash from the Cornplanter State Forest, Anders Run Natural Area. Contact: Cecile Stelter, DCNR, at 814-723-0262 or <u>cstelter@state.pa.us</u>.

**ENVIROTHON STUDY DAY** (Earth Day, April 22): *ECCD* worked with *USFS* to organize an "Envirothon Study Day" at the *USFS* Marienville Office on Earth Day. Contact: Kim Bonfardine, *ECCD*, at 814-776-5373 or <u>kbonfardine@countyofelkpa.com</u>.

**BEATY WARREN MIDDLE SCHOOL** (Earth Day, April 22): Seventh graders viewed the Disney movie *Oceans* in the morning and participated in outside activities in the afternoon. The students planted trees, cleaned up the school grounds, and participated in *Project WILD Aquatic* activities led by Barb McGuinness and other WINs partners. Contact: Barb McGuinness, *USFS*, at 814-563-1040 or <a href="mailto:bmcguinness@fs.fed.us">bmcguinness@fs.fed.us</a>.

<u>WARREN COUNTY ENVIROTHON</u> (May 7): Jean Gomory, *WCCD*, organized the annual Envirothon this year at Chapman State Park. The current issue was "protecting groundwater." Contact: Jean Gomory, *WCCD*, at 814-726-1441 or email jgomory@wcconservation.net.

<u>ALLEGHENY RESERVOIR CLEANUP</u>, 6th Annual (May 15): 71 volunteers collected 10 cubic yards of trash and litter from the shoreline of the Allegheny Reservoir. Contact: Nathan Welker, *USFS*, at 728-6163 4689 or email <a href="mailto:nwelker@fs.fed.us">nwelker@fs.fed.us</a>.

SUGAR GROVE ELEMENTARY SCHOOL 'GREEN DAY' (May 17): This year's event played host to 268 elementary school students who travelled to a small a farm in Sugar Grove where they learned about the outdoors and farms. Twenty-six presenters from a various organizations covered topics including: composting, wildlife sounds, farm animals, tree identification, plus many more. Next year's date is set for Monday, May 16, 2011. Contact: Katie Keeports can be reached at Katie.Keeports@wcsdpa.org.

# Trout & Clean Streams Expo, Fourth Annual

#### Partner - Sponsor: Cornplanter Chapter of Trout Unlimited

The third annual Trout & Clean Streams Expo held in Sheffield, PA, featured environmental education and outdoor recreational activities that were enjoyed by over 150 participants. Visitors to the Expo were treated to a variety of demonstrations, displays, and interactive events.



Fly Tying Demonstration at the 2010 Trout and Clean Streams Expo

A field trip featured the rehabilitation projects proposed on Morrison Run, a nearby native brook trout stream that has been a priority for the Cornplanter Chapter.

Attendees also enjoyed the displays of WINs Coalition partners that addressed the many programs and projects in our area. Other activities included educational demonstrations such as, aquatic insect collection, water quality sampling, spin fishing for trout, fly tying, fly casting, and kayaking.

The goal of the Expo was to provide an opportunity for our friends and neighbors to become more aware of current watershed projects and environmental issues we face. The Cornplanter Chapter hopes to gain the motivation and commitment of the community to work collectively to improve our watersheds.

#### Trout in the Classroom

#### Partner: Cornplanter and Iron Furnace Chapters of Trout Unlimited

Pennsylvania Trout Unlimited in partnership with the Pennsylvania Fish and Boat Commission's Sportfishing and Aquatic Resource Education Grant program sponsors the Trout in the Classroom program. Through this program, Allegheny WINs partners and TU members team up to work with the youth to ensure that they understand why it is important to protect and restore our coldwater resources. For the 2010-2011 school year, Trout Unlimited chapters are sponsoring 167 classrooms statewide, 29 of which are located in the northwest region.



A Trout Unlimited Guest Speaker at Clarion Elementary

Trout in the Classroom (TIC) is an environmental education program in which students in grades k-12 raise trout from eggs to fry, monitor tank water quality, study instream habitat, learn to appreciate water resources, begin to foster a conservation ethic, and grow to understand ecosystems

Most programs end the year by releasing trout in a state-approved stream near the school or within a nearby watershed (not into Class A trout streams). During the year, each teacher tailors the program to fit his or her curricular needs; therefore, each program is unique. TIC has interdisciplinary applications in science, social studies, mathematics, language arts, fine arts, and physical education.

Trout Unlimited members work hand-in-hand with teachers and the students to implement the program. The grants provide the school with all of the necessary equipment and training to start the program. Each new grant provides the school with \$1,000 worth of equipment and supplies – half of which is supported by the local TU chapter. Additional grants may be awarded in subsequent years of up to \$300 for replenishment materials and equipment so projects can continue in the next school year.

# Allegheny WINs Project Funding April 2007 – December 2010

Project	Objectives	Sponsor	Grantor	Funding	
Clarion River Watershed Projects					
	Eliminate aquatic organism	T-0.7	USFS Knutson- Vandenberg (KV) and watershed funds	\$118,860	
	passage (AOP) barriers	US Forest Service (USFS)	Garden Club Federation	\$7,500	
	and improve stream crossings, decommission roads, repair and add limestone to dirt and gravel roads to improve drainage and reduce sedimentation; improve instream and riparian habitat		USFS Stewardship Contracting	\$110,000	
Spring Creek Watershed Restoration		Western Pennsylvania Conservancy (WPC)	National Forest Foundation (NFF)	\$15,000	
		Conservancy (WFC)	WPC	\$50,000	
		PA Fish & Boat Commission (PFBC)	PFBC Cooperative Habitat Improvement Funds (CHIP)	\$3,000	
		PA Game Commission (PGC)	WPC	\$20,000	
Big Mill Creek Acid Remediation	Improve water quality and aquatic ecosystem health by constructing passive treatment pond systems	Elk County Freshwater Association	PA Department of Environmental Resources (DEP), Growing Greener - Phases I & II	\$414,000	
			PA Department of Conservation of Natural Resources (DCNR) - Phase III	\$250,000	
			Stackpole Hall	\$50,000	
			DEP Growing Greener - Phase III	\$393,000	
Clarion River Dispersed Recreation	Address erosion, sedimentation and sanitation concerns related to dispersed recreation	Elk County Commissioners	DCNR	\$107,700	
	Tionesta	a Creek Watershed Projects			
		Kellettville Sportsmen Club	KSC - 2009	\$2,843	
	Fish habitat improvement	(KSC)	KSC - 2010	\$1,860	
Ross Run			KSC - 2011*	\$2,000	
		PFBC	CHIP - 2009	\$3,540	
			CHIP - 2010 CHIP - 2011*	\$3,500	
East Branch Tionesta	Eliminate 10-12 AOP		NFF	\$3,500 \$211,000	
Creek Aquatic Organism	barriers from tributaries to	USFS	National Fuel Gas	\$90,000	
Oreck Aquade Organism	Remove fish passage		USFS American	9,000	
	barriers, reduce erosion and sedimentation, link and enhance recreational resources to Chapman State Park, SGL 29 and	USFS	Recovery and	\$250,000	
West Branch Tionesta Creek Watershed Restoration			Reinvestment Act funds		
		PGC	PGC	\$50,000	
		DCNR / Penn Soils RC&D	Northwest Greenways	\$11,300	
	Chapman Lake bank	DCNR	DCNR	\$12,510	
restoration	stabilization project		PFBC	\$2,000	
		USFS (Farnsworth)	USFS watershed funds	\$5,914	
	Fish habitat improvement	, ,	PFBC CHIP	\$1,500	
		PFBC (SGL29)	CHIP	\$2,500	
6.11.1		PFBC (Chapman SP)		\$2,500	
Subtotal this page				\$2,195,527	

Table continued next page

Project	Objectives	Sponsor	Grantor	Funding
·	Upper and Middle	Allegheny River Watersh	ed Projects	
Browns Run	Establish a baseline dataset, document threats and develop recommendations for protection and restoration of the watershed.	WPC	Coldwater Heritage Program	\$5,000
	or are materials.		Lumber Heritage Region Grant (DCNR)	\$25,000
			FirstEnergy Foundation	\$10,000
			FirstEnergy Corporation	\$10,000
	Construct a bird-viewing platform and a Riverside Watchable Wildlife Trail		Community of Foundation Warren County	\$7,500
			Northern Allegheny Conservation Assoc.	\$2,000
			Boy Scouts of American (Eagle Scout project)	\$1,950
Big Bend Recreation Area (Bird Viewing Platform)	over looking the Kinzua  Dam and Allegheny River	Allegheny Outdoor Club	Warren County Council of Sportsman	\$1,500
(Dird viewing Plauoffii)	to provide an		Betts Foundation	\$1,000
	environmental education		Whirley DrinkWorks!	\$1,000
	and recreation opportunity		Private Donations	\$1,880
	and recreation opportunity		Allegheny Outdoor Club	\$955
			Eastern National Forest Interpretive Association (ENFIA)	\$500
			Water Resources Education Network	\$280
		US Army Corps of Engineers (USACE)	USACE -	\$18,683 \$3,000
	December 1 and 1 a	CCTU	First Energy	\$1,000
	Decommissioning heavily		PA General Energy	\$1,000
	eroded ford		Chapter funds	\$800
	Fish habitat improvement  Streambank stabilization (BPRR trestle)	PFBC USFS	CHIP (2009)	\$1,200
			CHIP (2010)	\$1,000
Morrison Run Watershed			USFS	\$2,500
Restoration			Gas & Oil Management, Inc.	\$500
	Dam removal (lower) and bridge replacement	ССТИ	PGC	\$25,000
			Eastern Brook Trout Joint Venture (EBTJV)	\$0
			USFWS	\$20,000
Rain Barrel Workshop	Environmental education	Warren County Conservation District	PA DEP Environmental Education Grant	\$1,019
South Branch Kinzua Creek	Construct acid precipitation	PFBC	PA Fish and Boat	6130.000
	PTS, resurface section of		Commission	\$120,000
	road, and replace		EBTJV	\$25,000
	undersized culverts along FR279 improving	USFS	Capital improvement and road maintenance funds	\$104,482
Willow Bay	Fish habitat improvement and wetland restoration	WPC	USFS KV and watershed funds	\$44,650
TOTAL EXTERNAL FU	INDING			\$2,633,926

<sup>\*</sup> Projects and funding were included in this spreadsheet if two or more *Coalition* organization partnered to complete the work.

\*\* Funding has been applied for, but has not yet been awarded or is otherwise pending.

# **Volunteer Contributions by Project in 2010**

Project	Objectives	Partners	Volunteers	Hours	
	Clarion River Watershed I	Projects			
Big Mill Creek Acid Remediation	Improve water quality and aquatic ecosystem health by constructing passive treatment pond systems	Elk County Freshwater Association	104	381	
	Upper and Middle Allegheny River V	Vatershed Projects			
Allegheny Reservoir Cleanup (6th Annual)	Collect trash from 38 miles of reservoir shoreline	Warren County Adult Probation & Parole (WCAPP), USACE, and PFBC	71	568	
2010 Allegheny River Cleanup (2nd Annual)	Collect trash from 31 miles of the river and two major tributaries	CCWA, USACE, USFS, WCAPP, and 68 other organizations	511	4,292	
Anders Run Natural Area Cleanup (Earth Day)	Eliminated (2) illegal dump sites and collected trash from roadsides	DCNR, WCAPP, and USFS	11	92	
Big Bend Recreation Area	Provide an environmental education and recreation opportunity	AOC, PSRCD, and USACE	18	100	
Morrison Run Watershed Restoration	Fish habitat improvement	CCTU, PFBC, and USFS	13	78	
South Branch Kinzua Creek Acid Remediation	Construct passive acid remediation systems along Forest Road 279 treating two tributaries, resurface one mile of FR 279 and replace undersized culverts	PFBC and USFS	20	187	
Tionesta Creek Watershed Projects					
Farnsworth Fish Habitat Improvement	constructed 27 log and rock structures to stabilize streambanks and improve instream habitat	WPC, PFBC, and USFS	60	572	
Ross Run	Fish habitat improvement	Kelletville Sportsmen's Club, PFBC, and USACE	34	272	
TOTAL VOLUNTEERS AND HOURS DONATED			842	6,542	

# **Allegheny WINs Partners**

Partnerships and volunteers have made the WINs coalition the success that it is. Credit is due to various individuals from the organizations and government agencies listed below.

Non-profits	Acronyms
Allegheny Outdoor Club Brokenstraw Watershed Council Conewango Creek Watershed Association Elk County Freshwater Association Kellettville Sportsmen's Association Kinzua Fish & Wildlife Association Penn Soil Resource Conservation and Development Council Pennsylvania Council of Trout Unlimited Pennsylvania Council of Trout Unlimited – Cornplanter Chapter Pennsylvania Council of Trout Unlimited – Iron Furnace Chapter Pennsylvania Council of Trout Unlimited – Jim Zwald Chapter Western Pennsylvania Conservancy	AOC BWC CCWA ECFA KSA KFWA PSRCD PATU CCTU IFTU JZTU WPC
County Agencies	
Elk County Conservation District Forest County Conservation District McKean County Conservation District Warren County Adult Probation & Parole Warren County Conservation District Warren County Planning & Zoning Commission	ECCD FCCD MCCD WCAPP WCCD WCPZC
State Agencies	
Pennsylvania DCNR – Bureau of State Parks Pennsylvania DCNR – Bureau of Forestry Pennsylvania DEP – Northwest Regional Office Pennsylvania Fish & Boat Commission – Division of Habitat Management Pennsylvania Game Commission – Bureau of Wildlife Habitat Management Pennsylvania State University – School of Forest Resources	DCNR DCNR DEP PFBC PGC PSU
Federal Agencies	
US Army Corps of Engineers – Kinzua and Tionesta Dams US Forest Service – Allegheny National Forest US Fish and Wildlife Service – Pennsylvania Field Office	USACE USFS ANF USFWS